KARNATAKA TEST HOUSE PVT LTD.

MATERIAL TESTING LABORATORY

NABL Accredited Laboratory as per ISO/IEC 17025

NABL Accredited Lab Certificate No.T-0901

Report No. : KTH/F.AGG/1012-1503/2013-2014 **Date: 29.08.2013**

TEST REPORT ON AGGREGATE
(Fine Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
T- Dasarahalli Sub Division,
Bagalagunte, BBMP, Bangalore.

Name of the Project* : Improvements of drains at 11th cross of Havnoor Layout in Ward No.14.

Name of Contractor* : Mr. K.Nagaraju, Bangalore.

Source of Sample : Supplied by the Contractor.

Sample Received on : 22.08.2013.

Technical Reference : IS: 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

Sieve Analysis of Fine Aggregate

Sl. No.	Sieve size mm	% Passing	IS : 383 – 1970 Specification				Remarks
			% passing for Zone I	% passing for Zone II	% passing for Zone III	% Passing for Zone IV	
1	10	100	100	100	100	100	Falls in Zone –II as per table 4 of IS-383 – 1970.
2	4.75	93.6	90 – 100	90 – 100	90 – 100	95 - 100	
3	2.36	79.2	60 – 95	75 – 100	85 – 100	95 - 100	
4	1.18	61.8	30 – 70	55 – 90	75 – 100	90 - 100	
5	0.600	39.1	15 – 34	35 – 59	60 – 79	80 - 100	
6	0.300	10.6	5 – 20	8 – 30	12 – 40	15 to 50	
7	0.150	1.7	0 – 10	0 – 10	0 – 10	0 to 15	

* As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

(SREENIVASA.C)
TECHNICAL MANAGER

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ಟಿ. ದಾಸರಹಳ್ಳಿ ಉಪ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

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Report No. : KTH/C.AGG/1012-1502a/2013-2014 **Date: 29.08.2013**

TEST REPORT ON AGGREGATE
(Coarse Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
T- Dasarahalli Sub Division,
Bagalagunte, BBMP, Bangalore.

Name of the Project* : Improvements of drains at 11th cross of Havnoor Layout in Ward No.14.

Name of Contractor* : Mr. K.Nagaraju, Bangalore.

Source of Sample : Supplied by the Contractor.

Sample Received on : 22.08.2013.

Technical Reference : IS : 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

Sieve Analysis of Coarse Aggregate - 20mm

Sl. No.	Sieve size mm	% Passing	IS : 383-1970 Stipulations		Remarks
			Single Size	Graded Size	
1	40.	100	100	100	Sample confirms to Single size of IS: Stipulation of 20mm size Aggregate
2	20	87.6	85 to 100	95 to 100	
3	16	42.2	-	-	
4	10	4.1	0 to 20	25 to 55	
5	4.75	0.4	0 to 5	0 to 10	

* As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

(SREENIVASA.C)
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Report No. : KTH/C.AGG/1012-1502/2013-2014 **Date: 29.08.2013**

TEST REPORT ON AGGREGATE
(Coarse Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
T- Dasarahalli Sub Division,
Bagalagunte, BBMP, Bangalore.

Name of the Project* : Improvements of drains at 11th cross of Havnoor Layout in Ward No.14.

Name of Contractor* : Mr. K.Nagaraju, Bangalore.

Source of Sample : Supplied by the Contractor.

Sample Received on : 22.08.2013.

Technical Reference : IS : 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

Sieve Analysis of Coarse Aggregate - 40mm & down size

Sl. No.	Sieve size mm	% Passing	IS : 383-1970 Stipulations		Remarks
			Single Size	Graded Size	
1	63	100	100	100	Sample confirms to Single Size for IS: Stipulation of 40mm size Aggregate
2	40	85.4	85 to 100	95 to 100	
3	20	22.1	0 to 20	30 to 70	
4	12.5	1.5	0 to 20	-	
5	10	-	0 to 5	10 to 35	
6	4.75	-	-	0 to 5	

* As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

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Report No. : KTH/ CEMENT /1012-1505/2013-2014 **Date: 30.08.2013**

PHYSICAL TEST REPORT ON CEMENT

Interim 3 & 7 days

Name of the Customer*	:	**The Assistant Executive Engineer,** T- Dasarahalli Sub Division, Bagalagunte, BBMP, Bangalore.
Name of the Project*	:	Improvements of drains at 11th cross of Havnoor Layout in Ward No.14.
Name of Contractor*	:	Mr. K.Nagaraju, Bangalore.
Source of Sample	:	Supplied by the Contractor.
Type of Cement*	:	Ordinary Portland cement (OPC)
Brand of Cement*	:	Birla Super 53 Grade.
Sample Received on	:	22.08.2013
Period of Test	:	23.08.2013 to 30.08.2013
Technical Reference	:	IS: 4031(Part I–VI) 1988 (Reaffirmed–2000) & IS: 12269-1987.

Sl. No.	Test Conducted	Results	IS : 12269-1987 Stipulation	Remarks
1	Normal consistency	30.25 %	Not specified	-
2	Initial setting time	195 minutes	Shall not be less than 30 minutes	P
3	Final setting time	319 minutes	Shall not be more than 600 minutes	P
4	Compressive strength (Average of three results) a. 72 ± 1h (3 days) b.168 ± 2h (7 days) c. 672 ± 4h (28 days)	 30.02 MPa 41.41 MPa T.T.C	 Shall not be less than 27.0 MPa Shall not be less than 37.0 MPa Shall not be less than 53.0 MPa	 P P -
5	Fineness (By Blaine's air permeability method)	328.10 m^2/kg	Shall not be less than 225 m^2/kg	P
6	Soundness (Le-chatlier's method)	0.75 mm	Shall not be more than 10 mm	P

P: Passes IS requirement F: Fails IS requirement T.T.C: Test To be Conducted.

*As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

(SREENIVASA.C.)
TECHNICAL MANAGER

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Report No.: KTH/ST/1012-1504/2013-2014 **Date: 29.08.2013**

PHYSICAL TEST REPORT ON STEEL BARS

Name of the Customer*	:	**The Assistant Executive Engineer,** T- Dasarahalli Sub Division, Bagalagunte, BBMP, Bangalore.
Name of the Project*	:	Improvements of drains at 11th cross of Havnoor Layout in Ward No.14.
Name of Contractor*	:	Mr. K.Nagaraju, Bangalore.
Source of Sample	:	Supplied by the Contractor.
Sample Received on	:	22.08.2013.
Nature of Sample*	:	Reinforcement steel – 10mm.
Technical Reference	:	Tensile IS: 1786 – 2008 & IS: 1608–1995 (Reaffirmed–2000) Bend & Re-bend IS: 1786 – 2008 & IS: 1599 - 1985 (Reaffirmed–2000)
Grade of Steel*	:	Fe-500.

TENSILE TEST :

Dia (mm)	10	Limits as per IS : 1786-2008, Gr. Fe 500
Weight / unit length (kg/m)	0.693	10mm – 0.574 Min
Yield Stress (N/mm^2)	538.67	500 Min
Tensile Strength (N/mm^2)	617.04	8% More than actual 0.2% proof stress but not less than 545 N/mm^2
% Elongation (on 5.65 $\sqrt{A}$G.L)	19.5	12.0 Min.

BEND TEST:

Sl. No.	*Dia (mm)*	*Mandrel diameter*	*Observations*
1.	10	4 dia	No cracks observed. Passes the test.

REBEND TEST:

Sl. No.	*Dia (mm)*	*Mandrel diameter*	*Observations*
1.	10	5 dia	No cracks observed. Passes the test.

* As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

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E-Mail : kthblr@gmail.com Web Site : www.karnatakatesthouse.com

Report No : KTH/CT/1153-1820/2013-2014 **Date: 05.09.2013**

TEST REPORT ON CONCRETE CUBES

To,

The Assistant Executive Engineer,
T- Dasarahalli Sub Division,
Bagalagunte, BBMP, Bangalore.

Name of the Project* : Improvements of drains at 11th cross of Havnoor Layout in Ward No.14.

Name of Contractor* : Mr. K.Nagaraju, Bangalore.

Sample Received on : 03.09.2013.

Compressive Strength test as per IS: 516-1959 (Reaffirmed 1999) has been conducted on the concrete cube specimens, supplied by the Contractor and the results are tabulated here below:

Dimension of Specimen: 150mmx150mmx150mm

Sl. No	Cubes pertaining to the concrete cast at*(Details of structural member identification)	Grade of Concrete*	Date of casting*	Date of Testing	Age of Concrete on the date of test**	Contact area (mm^2)	Weight of Specimen (Kg)	Load in KN	Compressive Strength in N/mm^2
1.	Drain Concrete	M_{20}	29.08.2013	05.09.2013	7 days	22500	8.120	328	14.58
2.		"	"	"	"	"	8.100	344	15.29
3.		"	"	"	"	"	8.290	322	14.31

1 N/Sq.mm = 10Kg/Sq.cm.(Approx.)
*As Furnished by the Customer
**Based on the data furnished by the Customer
Note: A minimum of three cube specimens shall be supplied for testing as per IS:516-1959.

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